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FIRST CONFIRMED TENNESSEE NEST RECORD OF THE NORTHERN SAW-WHET OWL

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In the summer of 1992 on Unaka Mountain, Unicoi County, Tennessee's first actual nest record of a Northern Saw-whet Owl (*Aegolius acadicus*) was established. On 29 June an adult bird was observed peering from the hole of a nest box and two days later, on 1 July, four eggs were found in the box. The birds hatched in the last week of July and fledged in late August. The following is an account of the events which precipitated the placement of nest boxes on the mountain and a brief summary of the notable events which occurred during the period from discovery of the nest until post-fledging of three young birds. Research of the literature for the Saw-whet Owl in this area during the breeding season reveals both similarities and differences between my own findings and those of others.

The discovery of an adult Saw-whet Owl on Unaka Mountain by Dr. Fred Alsop in February 1992 prompted design of a research project which included placement of six nest boxes on the mountain to provide nest sites for the owls. We hoped to establish the first actual nest record for this species in the state.

For master's thesis research, under the direction of Dr. Alsop, I conducted a survey of the birds of Unaka Mountain's high altitude forests above 1280 m (4200 feet). Unaka Mountain has a boreal-type red spruce (*Picea rubens*) forest on its summit at ~1585 m (~5200 feet) surrounded by a typical northern hardwood forest, and is thus a suitable habitat for the Saw-whet. Interestingly, Unaka lacks Fraser fir (*Abies fraseri*), which is commonly associated with red spruce in the southern Appalachians.

On 29 June, the wind was blowing too hard to do normal survey routes of breeding birds. Having checked the six nest boxes on several prior occasions with no success it had been decided that it was probably too late for a Saw-whet to be

Fig. 1. On 12 July, while the author examined the eggs, the adult female owl flew back to the nest, clicked her bill defiantly, and placed herself down on the eggs.

Fig. 2. The young birds were banded on 24 August just before they fledged.

nesting. Despite this decision, a nearby box was checked again and an adult Saw-whet, startled by a noisy approach to the box, appeared in the box entrance. It looked periodically down at me and then into the surrounding woods for ~15 minutes, after which it retreated into the box.

The contents of the box were then examined on 1 July after discussing the find with Alsop. The incubating owl allowed an approach within 1.5 m (5 ft.) or so of the box before flying to a nearby perch. Four, almost round, off-white eggs were in the box. After some photography of the nest, the top was replaced and the owl flew back to the box (before the author could reach the ground). On 12 July the number of eggs had increased to five and the scenario was much the same. This time, though, the owl flew back to the box while the eggs were being examined, clicked her bill defiantly, and placed herself down on the eggs to guard them (see Fig. 1). She left again as the lid was replaced on the box, returning as the climb down began. On subsequent visits to the box while the female was incubating, it was interesting to note that she almost always flew out of the box to one particular tree and approached the box from a second particular tree.

On 2 August, after several visits, the box contained four owlets in a heap with only some downy feathering along their feather tracts. There was no sign of egg shells or the fifth bird. The adult bird that flew from the box had a different outward appearance than the owl of previous visits and may have been the male bird. Subsequent studying of photos has failed to resolve whether this was the male associated with the nest or not.

A brief visit on 6 August was the last daylight visit during which an adult was observed. Presumably the adults were kept busy hunting prey items for the quickly growing young owls. At least one of the adults was heard during the night on two different occasions at the box on later dates.

By 11 August the young birds had taken on the characteristic plumage, best described as chocolate brown above and rusty orange/brown below, with a white v-shaped eyebrow. The eyes were still somewhat dark and the birds were not very alert. One of the birds was considerably smaller than the rest and was likely being outcompeted for food.

On 16 August feathers were very well developed on the body and moderately so on the wings and tails of the owlets. The white eyebrow was now very broad and well defined. The birds were much more alert (except for the smallest) and the eyes had begun to turn yellow around their edges.

On 18 August, in the light of a nearly full moon, an adult Saw-whet came to the box, deposited its quarry, and left. The adult uttered a strange vocalization just prior to entering the box with food. It was sort of a hissing sound on the same pitch as the familiar "too...too...too" call. Young birds in the box responded immediately with very noisy begging calls. After the adult brought the food into the box, there was a struggle within, evident in the vocalizations and scratching of the walls of the box. This lasted approximately 55 minutes. It was uncertain whether the adult remained to tear up and distribute the food or not.

After photos and video were made of the young owls on 19 August by Alsop, Ron Austing, Chester Massey, Foster Levy, Stan Strickland, and the author, the birds were banded on a return trip 24 August before they fledged. After being banded by George Mayfield, Jr., Cleo Mayfield, and Rick Knight, pictures were made for the last time (see Fig. 2), and the birds were placed back in the nest.

Two days later, in the evening, a young bird had fledged and was observed by this author sitting on a bent-over tree near the box. About 30 minutes after dark an adult flew in and called to the owlets using the hissing call described above. The fledged owlet seemingly tumbled into the rhododendron nearby and was never seen again. The day after the banding, the remains of Hurricane Andrew passed over the mountain. At least two voices from inside the box answered an imitation of the adult call the day after the storm had passed.

The final visit to the box on 3 September found three birds gone from the nest and the fourth dead in the box. Later in September, a bird answered calls from the nearby trail but was unidentifiable as an adult or a juvenile as it was never seen. The first report of Saw-whets on Unaka in 1993 was this author's in May. As of 29 June, no nests had been discovered in any of the boxes.

The history of the Northern Saw-whet Owl in Tennessee is sketchy at best, due in part to the reclusive behavior of the bird. Also the small amount of time previously devoted to studying the owl and the habitats where it is found (Unaka Mountain in particular) has contributed to this lack of understanding. The first reported observation of a Saw-whet in Tennessee during the breeding season was made by Norman Hill and Richard Bowen of Harvard University. This was at Clingman's Dome in the Great Smoky Mountains National Park on 21 June 1941 (Stupka 1946). Albert Ganier made an editor's note in the same issue of ***The Migrant*** in which he reported a sighting of a small owl which was likely a Saw-whet at the Mount LeConte cabins (Ganier 1946). This observation was made by him and George Mayfield, Sr., on 30 June 1933. Subsequent to the 1946 report, Paul Adams, the man in charge of the cabins, made the statement that, based on his experience with the bird following his introduction to it, he would say that the first records should have been some time in the mid-1920's (Simpson 1968).

Prior to their discovery on Unaka, the closest place in Tennessee where breeding-season owls had occurred was on Roan Mountain, ~14 k (9 miles) E.S.E. Simpson reported a single Saw-whet on the Roan High Bluff on 13 April 1968 (Simpson 1968). LeGrand (1982) relayed a report of Saw-whets on Roan Mountain in June of 1981. The first confirmed report for Roan Mountain in Tennessee was made by Richard L. Knight (Eller 1985) during the breeding season in 1985. Subsequently, the owl has been reported in almost every breeding season on Roan Mountain (RLK personal communication).

The recent history of the Saw-whet on Unaka Mountain is short but well documented. On 22 February 1992, Alsop and Cathi Sullins encountered a Saw-whet on the northwest side of the mountain. The bird was in a dense great rhododendron (*Rhododendron maximum*) thicket in the transition zone between the red spruce forest and the northern hardwood forest where there were both scattered yellow birch (*Betula lutea*) and red spruce. It was the middle of the day and the bird had responded to a Saw-whet call imitation made by Alsop while trying to attract other birds. Neither this bird, nor any other Saw-whet, was heard to call voluntarily for several weeks after this sighting on any of several trips up the mountain to find the bird. Alsop reported at least one bird singing on the evening of 20 April in the same location and a possible second bird at a new location.

On the morning of 26 April 1992 (the spring count for the Lee R. Herndon Chapter of T.O.S.), a tape of a Saw-whet was played by this author at approximately the same

site as the previous report by Alsop at a volume necessary to drown 16-23 k (10-15 mph) winds through the dense fog of a typical mountain morning. It was fully expected there would be no reply. However, a Saw-whet did respond to the tape and obliged by landing 10 m (15 ft.) in front of my vehicle over the road (for my first ever look at a Saw-whet).

On 4 May 1992, a single bird was heard by the author calling towards the northwest end of Stamping Ground Ridge. While calling back to the bird, an immediate response from a different location by what was likely a second bird occurred. Driving to the original location of the bird heard by Alsop in February, a third bird was located calling below the road. After a drive around to another location, a fourth calling bird was heard above the road ~.5 k (.3 miles) from where the third bird had been. Because simultaneous calling from the birds did not occur, it is uncertain how many there were. There were at least two, and possibly as many as four, encountered in the 1.6 k (1 mile) or more of distance between where the first bird was calling and the location of the last bird. On one occasion in May of 1993, at least three birds were heard calling at different locations on the mountain by this author, two simultaneously.

Another encounter with a Saw-whet on Unaka came on 16 June 1992, while observing a territorial Magnolia Warbler (*Dendroica magnolia*) in the young spruce and rhododendron (both *R.maximum* and *R. catawbiense*) ~.5 k (.3 miles) NW of the summit of the mountain. At 09:30 a Saw-whet landed in a spruce tree about 6 m (19-20 ft.) from me, approximately 1 m (3 ft.) above the ground. The bird flew by within about 1.5 m (5 ft.) and was apparently unconcerned with my presence. After two or three minutes it regurgitated a pellet and left as quickly and silently as it had appeared. Attempts to call the bird back were fruitless. (This, along with Alsop's February sighting, is an interesting note in opposition to the often expressed opinion that the bird is completely nocturnal.) This was the last occasion, excluding the nesting birds, on which I encountered a Saw-whet in 1992.

Following approval by the USFS — Cherokee National Forest — to place the aforementioned boxes on the mountain, Alsop contacted Pete Wyatt of the TWRA for approval, and he responded by donating nine Wood Duck (*Aix sponsa*) boxes to the cause. Though larger (25.4 x 25.4 x 61.0 cm or 10 in. x 10 in. x 24 in.) than the box dimensions originally proposed (20 x 20 x 42 cm or 8 in. x 8 in. x 15-18 in.), it was decided to use them on the mountain. The boxes were filled to a depth of approximately 25 cm (10 in.) below the bottom of the 7.5 cm (3 in.) hole with wood shavings. Also, wire screen was tacked to the inside of the front face of the box below the hole. The placement of the boxes was based on the following criteria:

Boxes were to be placed in areas where birds had been heard calling first. They should be placed on the side of a tree facing away from prevailing winds. Areas of red spruce or yellow birch (or both) were favored where there was a clear approach to the entrance hole and plenty of dense undergrowth for the bird's hunting and concealment. Boxes were to be between 4.5 and 6.0 m (15-20 ft.) above the ground and mounted in such a way as to allow free growth of the tree.

By early June, six boxes were in place on the mountain: three in areas where owls had been heard calling, and three more in other areas which fit the description above. Boxes were attached to the tree with 25 cm (10 in.) steel gutter nails which were driven into the tree to a depth of 3.5-5 cm (1.5-2 in.) with a slight downward

angle through pre-drilled holes in the box. The holes for the nail were made slightly larger than the diameter of the nail so that the box could slide outward and upward on the nail as the trees grew.

The successful box was at an altitude of 1350 m (4425 ft.) on the northwest end of the mountain. Immediately surrounding the box, the habitat consisted of a mature second growth stand of red spruce, the major tree species in the canopy. The canopy height was approximately 20-30 m (65-100 ft.), and the red spruce tree on which the box was placed was 40 cm (~16 in.) d.b.h. Other red spruce trees in the area were anywhere in size from that of the nest box tree to saplings. Most were in the range of 20-40 cm (8-16 in.) d.b.h. There was a mid-story which consisted of yellow birch and fire cherry (*Prunus pennsylvanica*) and an understory of rhododendron (*R. maximum*). The understory was so dense that there was very little ground cover, excepting the leaf litter and occasional mosses and ferns which grew on or around fallen logs. This habitat type predominates or is present nearby all locations where a Saw-whet was observed or heard during 1992 on Unaka Mountain.

The dates of this nesting should be of particular interest to those who study this little owl. In the available literature, no evidence (from any part of the range of Saw-whets) of nesting this late could be found. In Tennessee, North Carolina and Virginia, there has been evidence found intimating that Saw-whets do nest here, but most of that has been from spring into early summer, not late summer.

In an unpublished account in nearby Virginia, John R. Baker and W. Dan Lovelace documented a Saw-whet nest on 29 March 1989. The owl was found residing in a box intended for northern flying squirrels (*Glaucomys sabrinus*). This, the first nest for the region, was located on the south side of Laurel Bed Lake in Russell County. From the description of the site location (Wallace Coffey pers. comm.) and the use of USGS topographical maps, the altitude of this nest site was determined to be ~1160 m (3800 ft.). The nest was made in the remains of what was likely a squirrel nest and contained two eggs "wet and having a creamy-white color". Habitat around the nest was described as mixed hardwood overstory ~23 m (75 ft.) in height with a hemlock understory ~9 m (30 ft.) in height. The tree on which the nest box was located was a deciduous hardwood with a 38 cm (15 in.) d.b.h. It is notable that this is a substantially different habitat from that of the Unaka Mountain nest site. Unfortunately, after the adult bird watched them from the box as they departed, this nest was found to have been broken up a month or so later when they returned. All that was left were egg shell fragments of what were considered to be two eggs.

LeGrand (1990) reported a nest found in North Carolina during the summer of 1989 in a northern flying squirrel box. During a recent communication with LeGrand, it was learned that another nest had been found in the vicinity of the first one in 1990. The first nest was found on 31 May 1989 by Alan Smith and Allen Boynton near Balsam Gap (Blue Ridge Parkway) on Brush Fence Ridge in Buncombe County. Young Saw-whets were observed on the nest by Smith and Travis Knowles on a follow-up visit to the site. The second nest was also found in a northern flying squirrel box by Boynton on 3 May 1990. It had two young on the nest at this point. The two owlets were still on the nest on 15 May according to the report (N.C. Natural Heritage Program Database). Though this second nest was on the south side of the parkway and the first was on the north side, they were located within ~3 k (2 miles) of each other. Although exact fledging dates were not recorded, these nest records were considerably earlier than the Unaka Mountain nest.

There have been five reports of fledged juveniles in western North Carolina (McKinney and Owen 1989), including Peake's (1965) first report of a juvenile in the Balsam Mountains, southeast of the Smokies. No other nests, however, have been reported.

In Tennessee, strong evidence of nesting was reported by McKinney and Owen (1989) from Claiborne County. They found two recently fledged juveniles (judged so because of their juvenile plumage, ungraceful landings and adult accompaniment). The habitat there is most assuredly different from the Unaka site. The elevation was 366 m (1200 ft.), ~984 m (3225 ft.) below the Unaka Mountain site. The flora in the area included primarily deciduous woodlands with patches of pines. It is also interesting to note the date of the discovery — 8 May 1988. This early date is likely a function of altitudinal, and thus climatic, differences. This is a considerably earlier date than those reported in the literature for the nearby areas mentioned above.

In June of 1969, visitors to the Smokies reported two fledged juvenile Saw-whets in a flame azalea (*Rhododendron calendulaceum*) bush on Gregory Bald. The elevation there is 1510 m (4948 ft.) (F.J.A. pers. comm.).

Cannings (1987) reports fledging dates as early as 17 May in British Columbia. This is in a part of what would likely be considered the main range for the Saw-whet. Both latitudinal and altitudinal differences come into play here in consideration of nest dates.

Because there were males calling by the middle of April, the nest at Unaka Mountain was possibly a second brood or, more likely, a second attempt by a female with a failed first clutch. The weather conditions soon after calling started could easily have foiled a first nesting attempt. There was considerably cold weather (slightly below 0°C) on the mountain as well as ~.6 m (22 in.) of snow which fell during the first week of May.

The Birder's Handbook (Erlich et.al. 1988) states that the incubation period for the Saw-whet lasts 26-28 days. Since incubation begins after laying of the first or second egg, and eggs are laid at 1-2 day intervals (Cannings, 1987), the eggs in the Unaka Mountain nest were laid beginning approximately 25 June. The box was checked on 23 July and nothing had hatched (this was 28 days after the second egg should have been laid). Because the next visit on 2 August revealed birds with dark eyes open (they are closed at hatching), it is likely that the hatching began on 24 or 25 July. Fledging occurred around 32 days or so later. This is all in accord with Erlich et. al. (1988).

The regurgitated pellets from the nest were collected following completion of nesting. There were several different species of prey items found in pellets in the nest of the Saw-whet on Unaka. Included among these prey were:

deer mice (*Peromyscus maniculatus*) - 19
boreal red-backed voles (*Clethrionomys gapperi*) - 12
short-tailed shrew (*Blarina brevicauda*) - 7
unknown shrew (2 different *Sorex* spp.) - 4
Dark-eyed Junco (*Junco hyemalis*) - 2

The unknown shrews were very small skulls with the dentition partially missing, making identification to the species difficult. Also found in the pellets were some insect exoskeleton parts and wing fragments. All were too small to be identified. Some of these could also have been from dermestids which were feeding on the

pellets and excrement of the owlets. There was no sign that the pellets were ever removed from the nest by the adult during the entire course of the nesting, so it is assumed that this is a fairly accurate account of the prey items.

For those of you who have never heard the call of the Saw-whet, it is recommended that you make it a point to pursue this experience. It will be one of my most memorable experiences and one of the more significant events in my ornithological career, as I am sure it will be for you.

ACKNOWLEDGEMENTS

The author would like to dedicate this manuscript to the memory of his grandfather and grandmother, Dr. and Mrs. George Mayfield, Sr., without whom the study of birds would not have been a part of his life nor of the lives of many others in the state of Tennessee with whom they shared their passion.

He would like to thank his wife, Kelli. Many hours have been spent away from home while doing this work and she has been more than understanding. He would also like to thank his parents for their support and encouragement to pursue studies in ornithology. Thanks also goes to Douglas Bernhard and Patricia Countiss for their help in placing the nesting boxes on the mountain and to Pete Wyatt of TWRA for providing the boxes; to Rick Knight and Wallace Coffey for their provision of source materials and guidance in preparation of this manuscript; and to Ron Austing for providing video footage of the nestlings. Finally, to Dr. Fred Alsop, Dr. Jerry Nagel, and Mr. John Warden, for their ideas and input to this part and the rest of his study of the birds of Unaka Mountain, he also extends his gratitude.

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The Migrant, 63 (4): 89-90, 1992.

THE LESSER BLACK-BACKED GULL IN TENNESSEE

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The Lesser Black-backed Gull (*Larus fuscus*) is a Palearctic species which breeds from Iceland through northern Europe to central Russia and winters in Europe and the Middle East to central Africa (A.O.U. 1983). It has been noted that a small number of these gulls regularly, and apparently increasingly, winter in eastern North America from the Great Lakes to the Texas gulf coast (op. cit.). Part of this increase may be due to the growth of birding and the improvement of field guides and observer skills. With the increased reports from North America, especially inland, it could have been expected that this species would eventually reach Tennessee.

The Lesser Black-backed Gull is a four-year gull, meaning that full adult plumage is not obtained until the fourth year (Grant 1982). The majority of birds seen in North America have been adults; however, it remains to be seen whether this is due to an actual increased dispersal of adults or, more likely, to the difficulty in identifying immatures, which are very similar in appearance to immature Herring Gulls (*L. argentatus*). A further complication is that hybrids occur and can confuse even an experienced observer. Specifically, it is known that the Herring Gull hybridizes with the Great Black-backed Gull (*L. marinus*), with immatures of this cross being very difficult to separate from immature Lesser Black-backed Gulls (Foxall 1979).

In 1989-1990 there were four reports of Lesser Black-backed Gull in Tennessee. The first was an adult at Watauga Lake following the passage of Hurricane Hugo on 22 September 1989 (Hall 1990, Lewis 1990); but, due to distance and lack of direct size comparison, this record is probably best regarded as black-backed gull sp. (Langridge and Cross 1991). On 11 November 1989 near Pace Point, on Kentucky Lake, a first-winter Lesser Black-back was seen by two experienced observers. With numerous other gulls for comparison, it was attracted to a boat by chumming. Photographs were taken, but were not satisfactory (J.R. Wilson *pers. comm.*). Between January and April 1990, a first-winter bird was seen by several observers at Pickwick Dam, but adequate photo documentation was not obtained (Jackson 1990). A presumed first-winter Lesser Black-back was seen on 28 December 1990 at Pickwick Dam; then the same bird, as well as a probable second-winter bird, was seen by the same person the following day (Waldron 1991, D.J. Simbeck *pers. comm.*).

On 13 February 1991 I was birding alone at Chickamauga Lake, near Harrison Bay State Park, in Hamilton County, Tennessee. There were large numbers of Ring-billed Gulls (*L. delawarensis*) present. While looking at one group of about 50 gulls roosting on a small sand island, I noticed a single dark-mantled gull. It was clearly larger than the Ring-billed Gulls and appeared to be nearly the size of a Herring Gull. The head was white with light brown streaking. The bill was yellow with a dark spot on the lower mandible and did not appear to be as heavy as the bill of a Great Black-backed Gull. The mantle was a dark slate gray and the wing tips were black. The legs were clearly noted to be yellow. The bird was seen briefly in flight, but only at some distance. The tail was solid white.

After concluding that the bird was an adult Lesser Black-backed Gull, I contacted several other birders in the Chattanooga area and the bird was seen by five other

observers (Ken and Lil Dubke, Paul Harris, John Henderson, and Al Jenkins). Unfortunately, after about 90 minutes, the bird disappeared and, as far as I know, was never relocated. There was a steady rain falling the entire time that the bird was under observation. The shortest distance from the bird to the viewers was estimated to be 150 m. Photographs were taken, but were of marginal quality due mostly to the reduced available light. However, they do demonstrate the bird's size and mantle color in comparison to the adjacent Ring-billed Gulls; but other field marks are not well delineated. A Kowa TSN-4 and Questar spotting scopes were used for the observation. The details and a photograph were submitted to and accepted by the Tennessee Bird Records Committee.

In summary, I feel this to be the first well documented (photos plus multiple observers) record for the Lesser Black-backed Gull in Tennessee.

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The Migrant, 63 (4): 91-93, 1992.

MINUTES OF FALL 1992 TOS BOARD OF DIRECTORS MEETING

The 1992 Fall Meeting and Symposium, consisting of a Board of Directors meeting, symposium, and field trips, was held at Arnold Lakeside Club of AEDC on the shore of Woods Reservoir near Tullahoma, Tennessee, on 30 October - 1 November 1992.

The Board of Directors Meeting was called to order by President Bob Ford at 4:15 p.m. on 31 October. Minutes of the Spring 1992 Board Meeting were distributed in advance and approved as written.

COMMITTEE REPORTS: There were no VICE PRESIDENTIAL or DIRECTORS-AT-LARGE REPORTS, except that Middle Tennessee Vice President Ann Tarbell thanked the Highland Rim Chapter for a good job in hosting the Fall Meeting.

TREASURER'S REPORT: As filed in detail with these minutes, was presented by Helen Dinkelspiel in the absence of Treasurer George Payne, Jr. The report was approved as presented. Highlights for the period of 28 April - 28 October, 1992 included:

— TOS ASSETS were $92,727 as of the Fall Meeting.

— INCOME was $7,870, including: $3,089 in dues, $659 in interest, and $4,122 in Atlas Fund contributions (including $4,000 from The Monsanto Company of Columbia, TN)

— EXPENSES totaled $5,194, including: $4,350 for ***The Migrant***, $445 for the *Tennessee Warbler*, and $1,399 for miscellaneous.

— The 1993 BUDGET was projected at $15,825, based on an anticipated income of $15,950.

— Paid-up MEMBERSHIP for 1992 was 901 (plus Upper Cumberland's 22; see below), compared to a final of 912 members for 1991.

President Ford added to the MEMBERSHIP portion of the Treasurer's Report that Candy Swann has reactivated the Upper Cumberland Chapter of Cookeville, which was never officially deactivated during their brief period of inactivity. This chapter has a membership of 22, which was not included in the Treasurer's Report.

CURATOR Chuck Nicholson reported that most old issues of ***The Migrant*** are being stored in Nashville for later sending to Rhodes College Library in Memphis. Mac McWhirter of Memphis will be the Associate Curator there, in charge of ***Migrant*** storage. The current charge was $1.00 per back issue, plus postage for mailing. Ben Coffey moved that the Associate Curator, Treasurer, and ***Migrant*** Editor be authorized to set a price for back issues of ***The Migrant***. The motion was seconded and approved.

MIGRANT EDITOR Wallace Coffey reported that about 20 people met at Lebanon in the summer of 1992 concerning future direction for ***The Migrant***, beginning with the March 1992 issue. A priority is to get future issues back on time. The March 1992 issue was expected to be published by early 1993. Two season reports will be included per issue until we catch up. Former Editor Chuck Nicholson advised that mailing permit should be changed from Norris, TN by the next year.

Ken Dubke moved that the cover on the 75th anniversary issue of ***The Migrant*** become the permanent cover for future issues. The artist is Teresa Bullock, daughter-in-law of TOS member Carolyn Bullock and a staff artist with the Memphis Light and Gas Company. The motion was passed with one dissenting vote.

ATLAS COMMITTEE Chairman Chuck Nicholson reported that he hopes to complete the Atlas manuscript by early 1993.

BIRD RECORDS COMMITTEE Chairman had no report. Bob Ford advised he proposed to recommend a new Committee structure at the Spring 1993 Meeting.

The BIRD RECORDS COMMITTEE had no report. President Ford reported on discussion for changing the structure of the Committee. He and possibly a committee will present plans and a time table at the Spring, 1993 meeting.

CONSERVATION AND EDUCATION COMMITTEE Chairman Ken Dubke moved for passage of a Resolution for TOS's support of TWRA in its plans for development of a state model neotropical migrant bird project. The motion was seconded and approved. Dubke further reported sending several conservation letters to agencies in support of TOS objectives.

PATCHES AND DECAL COMMITTEE: Chairman Bill Bridgforth could not be present but has been quite active as the new chairman. Wallace Coffey reported that he and Dr. Bridgforth have obtained quotations for a wide variety of: bumper stickers, watch with TOS logo, lapel pins, embroidered patches with multiple colors, and cups with TOS logo. Coffey moved for appropriations of up to $300 to have 200 patches embroidered in color. Subject to TOS Executive Officer approval, he proposed a gold border for life members and a standard color border for other members. The basic design is proposed to be donated by Dr. Fred Alsop; other design recommendations may be submitted to President Ford by 1 January, 1993 for adoption of a final design by the TOS Executive Officers. TOS would net about 20 percent on sales; a price is to be determined. The motion was seconded and passed.

Carolyn Bullock advised that some of the 75th anniversary patches are available for $1.00. She also has group pictures from the 75th anniversary meeting for a cost of $4.50 each.

WARBLER EDITOR Dianne Bean reported that she had mailed out 890 issues of *The Warbler*. The deadline for articles for the next issue is 1 March, 1993.

TENNESSEE ENVIRONMENTAL COUNCIL Representative Ken Dubke reported he has been unable to attend Council meetings since the last report. However, he has received their mailings and acted on them, including coordination with Chester McConnell on protection of wetlands.

AWARDS COMMITTEE Chairman Ron Hoff could not be present. President Ford reported Hoff wants to step down as chairman of this Committee, which issues awards at the Spring meeting. Interested persons in the position should contact President Ford.

President Ford reported Paul Hamel of the BIRD MONITORING COMMITTEE has been developing guidelines for TOS members to monitor birds on different lands and habitats in Tennessee.

HISTORIC MARKER COMMITTEE Chairperson Margaret Mann reported that Metro Nashville Council passed a Resolution thanking Ben and Lula Coffey and other TOS participants for installing the historical marker near the founding of TOS between 4th and 5th Avenue North in Nashville in May, 1992. The Resolution Number is R-92247, a copy of which will be filed with the TOS Secretary. She also reported that Radnor Lake has a new exhibit about the history of Radnor Lake, with substantial mention of TOS.

OLD BUSINESS: As has been recommended by Dr. David Pitts, President Ford advised that he desires to appoint a HISTORIAN to keep records of historic activities and people within TOS. Bill Fletcher of Memphis recommended that President Ford write a job description for publication in *The Warbler*, for which he agreed.

President Ford reported that Blair School of Music has not responded with more information concerning their request for TOS financial support for a proposed BIRD-RELATED MUSICAL SYMPHONY. Such funding consideration was therefore withdrawn.

NEW BUSINESS: It was recommended that future meeting agendas and proposed TOS Resolutions be distributed to members in *The Warbler*, or otherwise, in advance of meetings.

Jim Brooks moved for a MEADOWVIEW MARSH RESOLUTION for protecting breeding habitat of the Virginia Rail and other wildlife in a Kingsport wetland that is proposed for partial filling and development of a new convention center. It was seconded and approved. It was to be directed to the City of Kingsport.

Ms. Tommie Rogers suggested a TOS BIRD CALENDAR for sale to make money for habitat protection for neotropical birds. Samples from other areas were passed around. She planned to submit a more detailed proposal at the Spring Meeting, 1993.

Bill Fletcher of Memphis reported the Spring 1993 Meeting will be 30 April - 2 May 1993 at Reelfoot Lake. Registration on the night of 30 April will be at the Airport Inn, with the banquet at Ellington Auditorium. Details will be published in *The Warbler*.

Wallace Coffey moved for a special *Warbler* issue concerning the Neotropical Birds, provided funding is available from the National Fish and Wildlife Foundation. Bill Haley of Chattanooga agreed to typeset a manuscript to be written by Bob Ford, if publication and mailing are funded. The motion was seconded and passed.

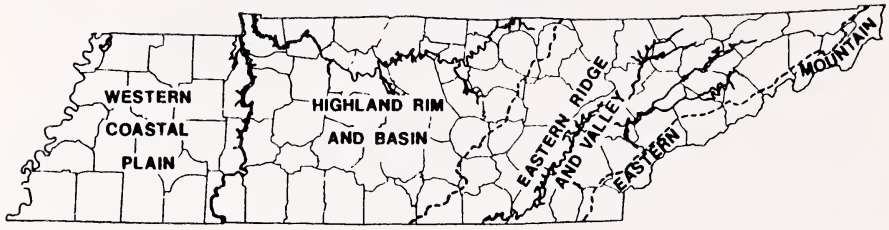
Wallace Coffey advised the Virginia Society of Ornithology has requested TOS exchange a membership list with them. Chuck Nicholson moved that the TOS membership list be made available on a one-time basis for use by Virginia Society of Ornithology in recruiting members. The motion was seconded and passed with one dissenting vote.

Respectfully submitted,
BOB HATCHER, TOS Secretary

The Migrant, 63 (4): 94-100, 1992.

THE SEASON

ROBERT P. FORD, Editor



SUMMER: 1 JUNE - 31 JULY 1992

Weather patterns were cool and wet across the state this summer, an extension of the unusual spring weather this year. Wet weather kept observers from traditional locations in the low bottomlands of west Tennessee, and may have delayed or impacted the success of nesting birds across the state.

However, significant nesting observations were documented this season. The most notable, especially after years of searching and waiting, was the Northern Saw-whet Owl in upper east Tennessee. A late, but apparently successful, nest was discovered on Unaka Mountain by Rad Mayfield. Other nest records included a new heronry in middle Tennessee and a nesting Song Sparrow at the same site for the third year in west Tennessee. Enticing nesting evidence, but no nest, was observed for two unusual species, a Savannah Sparrow in east Tennessee, and the question of a Brewster's Warbler in mid-June, observed carrying food with a Blue-winged Warbler in middle Tennessee. Real rarities and vagrants were relatively few this season, although a couple of surprises are documented in the details of this Season.

With this report, regional compilers have attempted to lengthen location names and accentuate species of interest in order to make the Season report easier to read. The general format, however, has been retained to keep as much information as possible available to future researchers of Tennessee ornithology. I invite your opinions about these subtle changes; do we need more? As a final note, many of the records in this and the Spring 1992 Season are material for outstanding, brief Roundtable Notes. Please consider submitting details to the ***Migrant*** Editor.

Abbreviations in this report include: ad-adult; ahy-after hatching year; b-banded; BBS-Breeding Bird Survey; Co.-county; EOP-End of Period; ers-earliest reported sighting this season; et al.-and others; f-female; fide-reported by; hy-hatching year; im-immature; lrs-latest reported sighting this season; m-male; max-maximum count on one day; m.ob.-many observers; ph-photo; yg-young; *-details submitted.

WESTERN COASTAL PLAIN REGION: Access was limited to many birding locations this season because of above average amounts of rainfall and cooler temperatures for the summer season. As a result, the number of sightings may seem lower than during previous years. However, there were several early sightings and unusual records. For example, the Lesser Golden-Plover and the Willet set early dates. Summer occurrence of the Ruddy Duck and Black-billed Cuckoo were

unusual for West Tennessee. Interests in nesting birds were carried over from the Breeding Bird Atlas project and are duly reflected in this report. Besides the growing colony of Black-necked Stilts at the EARTH Complex, nesting Song Sparrows were recorded for a third year.

Grebe-Moorhen: Pied-billed Grebe: 28 Jul (1) Rlft L, Obion Co. (WGC). Double-crested Cormorant:14 Jul-EOP (3) Rlft L, Lake Co. (WGC). TVA and TWRA did not sponsor an aerial survey of the heronies in west TN. Great Blue Heron, Little Blue Heron, Great Egret, Snowy Egret, and Cattle Egret were reported in all of the river counties (WGC, JPR). Black-crowned Night-Heron: 2 Jun-23 Jul (1) Burnt Wds (WGC). Yellow-crowned Night-Heron: 2 Jun (1) Burnt Wds, 5 Jul (1 im) Phillipy, Lake Co. (WGC); 9 Jun (1 nest, 1 yg) midtown Memphis (Bob Browne), 18 Jun (4 nests, 15 yg) midtown Memphis, (15 nests, 2-3 yg) southwest Shelby Co. (OKM, MGW), second year for this site; 18 Jun (3 nests, 3-4 yg) southwest Shelby Co. (MGW), sixth year at this site; 28 June (1) Lwr Hatchie NWR (DoM, VBR, CHB, MGW). Blue-winged Teal: 11 Jun (1 m) Tptnv Sld Lg, 28 Jul (1) Burnt Wds (WGC). Ruddy Duck: 2 Jun/28 Jul (1 m) Rlft L (WGC), second Lake Co. summer record. Black Vulture: 16/18 Jun (1/3) Long Point, 20 Jun (1) Gray's Camp (WGC); 2 Jul (3) Obion Co. (MAG). Mississippi Kite records were received from all areas of Shelby Co., all Mississippi River counties and many interior west TN counties. Bald Eagle: 1 Jun - EOP (2 nests, 3 yg) Rlft L, Lake Co. (1 nest, 2 yg) Lake Isom, Lake Co. (Jim Armacost). Osprey: 1 Jun (on nest) Rlft L, Lake Co. (VBR, MGW); 9 Jul-EOP (1) Gray's Camp (WGC). A total of three nests were observed at Rlft L. One nest fledged two young, no information on the success of the two additional nests was available (Jim Armacost). Sharp-shinned Hawk: 28 Jun (1) Lwr Hatchie NWR (DoM, VBR, MGW, CHB). Broad-winged Hawk: 27 Jun (1) Decatur Co. (CHB). American Kestrel: 1 Jun (pair) Rlft L, Lake Co., 18 Jul (1) Miston, Dyer Co. (WGC). A total of 16 fledglings abandoned at their nesting sites in Shelby Co. were taken to the Memphis Zoo to be hand reared. Common Moorhen: 9 Jul (2 ad, 2 downy chicks) Gray's Camp (WGC, Thomas V. Heatley).

Shorebirds: Shorebird migration at The Earth Complex (TEC) was recorded (except where noted) by the following observers: PMA, CHB, MLG, DoM, VBR, DLW, MGW. During the spring and summer many fields were flooded along the Great River Road/181/Tiptonville-Obion Levee and secondary roads 103W, 79W. The references that follow are designated as Dyer or Lake Cos. Black-necked Stilt: 7 Jun (6), 20 Jun (12), 23 Jun (30+ adults, 4 yg, 14+ nests), 1 Jul (10 nests, one with 2 eggs, one with 6 eggs, 8 with 4 eggs, 3 additional nests in other lagoons, possible three additional in south lagoon) TEC (PMA). No nests or adults at the north Shelby Co. site (MGW). Lesser Golden-Plover: 18 Jul (1) #9 lake just north of TN line in KY (WGC); 22-24 Jul (1) TEC (MLG, MGW, PMA), early Shelby Co. record. Semipalmated Plover: 1 Jun/28 Jul (2) Is 13, 2 Jun (1) Burnt Wds, 18/19 Jul (2) Lake Co. , 22-28 Jul (1) Dyer Co. (WGC); 21/24 Jul (2) Shelby Farms (MLG); 23 Jul-EOP (2) TEC. Greater Yellowlegs: 29 Jun (1) Lake Co., early state record, 19 Jul (1) Dyer Co., 18-23 Jul (1) Burnt Wds, (12 max) Dyer Co. (WGC); 22/24 Jul (1) TEC. Lesser Yellowlegs: 3-23 Jul (17 max) Dyer Co., Lake Co. (WGC); 12 Jul-EOP (175 max) TEC. Solitary Sandpiper: 14 Jul-EOP (12 max) Dyer Co., Lake Co. (WGC); 12 Jul-EOP (25 max) TEC. WILLET: 14 Jul (2) two locations, Lake Co. (WGC), early. Spotted Sandpiper:

10 Jun/28 Jul (5) Is 13, 25 Jun/18 Jul (1 ad/2 ad) Tpton Sld Lg, 14 Jul-EOP (7 max) Dyer Co., Lake Co. (WGC); 19 Jul-EOP (3 max) TEC. Semipalmated Sandpiper: 14 Jul-EOP (1/3) Dyer Co., Lake Co. (WGC), 19 Jul-EOP (220 max) TEC. Western Sandpiper: 19-24 Jul (4) 22 Jul (85) TEC (MLG); 22 Jul (7) Dyer Co. (WGC); 23 Jul (1) Is 13 (DoM, CHB, MGW). Least Sandpiper: 9 Jul (1) Lake Co., (4) Is 13 (WGC); 12 Jul-EOP (360 max) TEC; 14-23 Jul (17-70) Dyer Co., (15) Lake Co. (WGC). White-rumped Sandpiper: 1 Jun (6) Is 13, (3) Burnt Wds (WGC). Pectoral Sandpiper: 9/14 Jul (1) Burnt Wds, 14-23 Jul (15 max) Dyer Co. (WGC); 12 Jul-EOP (505 max) TEC. Stilt Sandpiper: 14 Jul (1) Lake Co., 23 Jul (3) Dyer Co. (WGC); 19 Jul-EOP (14 max) TEC. Dowitcher species: 14 Jul (4) Burnt Wds, 18-23 Jul (3) Dyer Co. (WGC); 22 Jul (1) TEC. Short-billed Dowitcher: 9 Jul (1) Is 13 (WGC); 19 Jul - EOP (1) TEC; 24/31 (3/1) Shelby Farms (MLG). Long-billed Dowitcher: 19 Jul (3) TEC (MGW, CHB).

Gull-Sparrow: Ring-billed Gull: 9 Jul (2) Is 13 (WGC). Caspian Tern: 21 Jul (2) Is 10 (JPR). Forster's Tern: 21 Jul (1) Is 10 (JPR); 21 Jul (1 winter plumage) Shelby Farms (MLG). Least Tern: 21 Jul (150) Is 10 (JPR); 21 Jul (7) Shelby Farms (MLG). Black Tern: 21 Jul (5) Shelby Farms (MLG); 21 Jul (60) Is 10 (JPR). Black-billed Cuckoo: 1 Jun (2) Is 13 (WGC); 24 Jul (1) Is 13 (MLG, TAF), first summer observations for county, second for region. Willow Flycatcher: 5 Jun (1) Fayette Co. (RWP, WPP). Purple Martin: 9/18 Jul (165/400) Is 13, (275) Gray's Camp (WGC); 23 Jul (4,000+) Is 13 (DoM, CHB, MGW). Tree Swallow: 1 Jun (pair feeding yg) Tptn Sld Lg, 16 Jun (10) Is 13 (WGC). Rough-winged Swallow: 9 Jul (40+) Gray's Camp (WGC). Fish Crow: 2 Jul (10) Rlft L, Obion Co. (MAG); 26 Jul (1) east Memphis (Jeanne and George Payne). Cedar Waxwing: 1 Jun (2) Is 13 (WGC). Loggerhead Shrike: 2 Jun (6) Whiteville BBS (CHB, VBR); 6 Jun (1) Brownsville BBS (Sue and James Ferguson); 1 Jun-EOP (2 pair, both with yg) TEC. Warbling Vireo: 28 Jun (2) Levee, sw Shelby Co. (DoM, MGW). Yellow Warbler: 1 Jun (nest), 20 Jun (1) Is 13 (WGC). Pine Warbler: 12/17 Jul (1 yg) Shelby Farms (MGW). Cerulean Warbler: 2 Jul (2) Rlft L, Obion Co. (MAG); 7 Jul (6) Shelby For.S.P. (MAG). Swainson's Warbler: 7 Jul (8) Shelby For.S.P. (MAG). Hooded Warbler: 2 Jul (1) Rlft L, Obion Co. (MAG). Scarlet Tanager: 5 Jun (1) Fayette Co. (RWP, WPP); 27 Jun (1) Decatur Co. (CHB). Savannah Sparrow: 5 Jun (1 singing) Fayette Co. (RWP, WPP). Song Sparrow: 20/28 Jun (1), 1 Jul (1 pair), 8 Jul-EOP (2 pair) TEC, third summer (Dianne Bean, CHB, MLG, DoM, VBR, MGW).

Locations: Burnt Wds-Burnt Woods Road, Reelfoot, Lake Co.; Gray's Camp-Gray's Camp, Reelfoot, Lake Co.; Is 10-Island 10, Lake Co.; Is 13-Joe Echles Towhead, Lake Co.; Lwr Hatchie NWR-Lower Hatchie NWR, Tipton and Lauderdale Cos.; Shelby Farms-Shelby Farms was Penal Farm, Memphis, Shelby Co.; Rlft L-Reelfoot Lake, Obion and Lake Cos.; Shelby For.S.P.-Shelby Forest State Park, Shelby Co.; TEC-The EARTH COMPLEX was Ensley Bottoms, Shelby Co.; Tptn Sld Lg-Tiptonville Sludge Lagoon, Lake Co.

MARTHA G. WALDRON, 1626 Yorkshire Dr., Memphis, TN 38119

HIGHLAND RIM AND BASIN REGION: The weather in Nashville during the period was cooler than normal in June (-3.4 degrees F) and normal in July. Rainfall was slightly above average in June and 2 inches above normal in July. Highlights of the season were the discovery of a heronry at Old Hickory Lake, a nesting Barn Owl

with young, and a Scissor-tailed Flycatcher and Brewster's Warbler observed in nesting activity. The observation of a Bachman's Sparrow was another unusual report for this season.

Cormorant-Barn Owl: Double-crested Cormorant: 20 Jul (1) Fate San. (MLM). Herons: an active heronry was observed on an island in Old Hick. L. near Lock 3, Sumner Co. It was visited on 11, 14, 17 June and 5 July (*FJM, RN, Michael Lee Bierly, et al.). Maximum numbers seen were Great Blue Heron (4), Great Egret (3), Cattle Egret (30), and Black-crowned Night-Heron (150). Courtship activity was observed for the Great Egret but nesting activity could not be confirmed. Cattle Egret: 15 June (20) Summitville, Coffee Co. (Albertine Jenkins), 30 July (13) Shelby Bottoms, Davidson Co. (*Mark Hackney). Bufflehead: 11 Jun (1 f) Old Hick. L. (*FJM, RN, Alan Booth), first June record for middle Tennessee. Black Vulture: 5 July (1 yg in unused blind) Old Hick. L. (*FJM et al). Osprey: 20 July (1) Fate San. (MLM). Sandhill Crane: 26 July (1 im) McMinnville, Warren Co. (*Mark Gudlin), observed feeding in a field. Barn Owl: June & July (2 ad, 2 yg.), Tullahoma, Coffee Co., hollow tree in subdivision (Ruth Luckadoo).

Flycatcher-Sparrow: Scissor-tailed Flycatcher: 6 June (1 f) Winchester, Franklin Co. (DLD et al.), ph, observed nest building. Tree Swallow: 17 June (8) ad feeding yg Old Hick. L. (*FJM et al.). Cliff Swallow: 12 June (200) Buffalo River, Wayne Co., 100 active nests on Tenn 13 bridge (FJM). Swainson's Thrush: 1 June (1) Rad. L. (MLM), lrs. Blue-winged Warbler: 18 June (1 b, AHY) Gordbg. (GRM). BREWSTER'S WARBLER: 13 June (1 ad, m) AEDC (*DLD et al.), observed with female Blue-winged Warbler, both carrying food. Northern Parula: 18 July (1 singing m) Gordbg. (GRM). Black-throated Green Warbler: 9 June (1) Narrows of the Harpeth River, Cheatham Co. (MLM). Yellow-throated Warbler: 18 July (3 singing m) Gordbg. (GRM). Cerulean Warbler: 18 July (1 singing m) Gordbg. (GRM). Black-and-white Warbler: 27 July (1 singing) Pennington Bend, Davidson Co. (MLM). American Redstart: 18 July (2 b) Gordbg. (GRM); 23 July (1 singing) Gordbg. (GRM). Prothonotary Warbler: 23 July (1) Rad. L. (MLM), lrs. Worm-eating Warbler: 18/23 July (10 b, one HY) Gordbg. (GRM). Kentucky Warbler: 18/23 July (12, one HY) Gordbg. (GRM). Bachman's Sparrow: 20 June (2) AEDC, details and tape of song reported, (DLD et al.), observed on other dates. Lark Sparrow: 27 June (2) McMahan, Cannon Co. (DLD), seen previous summer. White-throated Sparrow: 7 June (1) Love Circle, Davidson Co. (Jan C. Alexander), lrs.

Locations: AEDC-Arnold Engineering Development Center, Franklin Co.; Fate San.-Fate Sanders, J. Percy Priest Lake, Rutherford Co.; Gordbg-Gordonsburg, Lewis Co.; Old Hick. L.-Old Hickory Lake, Sumner Co.; Rad. L.-Radnor Lake, Davidson Co.

P. GALEN LENHERT, 3109 Overlook Drive, Nashville, TN 37212

CUMBERLAND PLATEAU/RIDGE AND VALLEY REGION: The cool, wet conditions of late spring continued into June. Rainfall during that month ranged from 8.9 inches (+5.5 inches) at Chattanooga to 3.4 inches (normal) at Johnson City. Over the remainder of the season, temperatures were slightly below normal and

rainfall was slightly above normal for the entire region. This summer was reported as one of the coolest on record (including August). Avian responses included delayed breeding in some species and poor success of some May-early June clutches. Ground nesters probably fared poorly during this period. Later clutches seemed to do better; in particular, bluebirds had another banner season in the northeast. Red-headed Woodpeckers, Loggerhead Shrikes and Warbling Vireos were found in decent numbers (compared to recent years) in the northeast portion of the region. A few, and welcome, reports came from the plateau. The first waves of southbound shorebirds were encountered. A vagrant Mississippi Kite and a potentially nesting Savannah Sparrow were the most unusual occurrences.

Loon-Heron: Common Loon: 22-24 Jun (1) Cedar Creek, Greene Co. (Susan Ford, Linda Northrop, Phine Britton), grounded on a small farm pond, released at Nolichucky Waterfowl Sanctuary, Greene Co. Pied-billed Grebe: 17 Jun (1) Chick. L. (KC). Great Egret: 1 Jun-EOP (1-2) Sav. Bay (KHD, LHD); 7 Jul-EOP (1-4) Bra. Lev. (BGM); 10 Jul (2) Chick. L. (David F. Vogt); 11 Jul (4/1) Hiwas. R./Hmlt. Co. (Mary Lynn Buttram, RJH); 23 Jul (1) Boone L., Sull. Co. side (RLK). Little Blue Heron: 1 Jul (1/1) Hiwas. R./Hmlt. Co. (Mary Lynn Buttram, RJH); 16 Jul-EOP (1-3) Bra. Lev. (BGM); 16 Jul-EOP (1 im) Nolichucky Waterfowl Sanctuary, Greene Co. (Jim Holt et al.). Cattle Egret: 1 Jun-EOP (up to 65) Hmlt. Co. (WGH, RJH et al.). Black-crowned Night-Heron: 6 Jun (100+) Fort Loudoun Dam, Loudon Co. (JAK); thru season (15-20) Boone Dam, Wash. & Sull. Cos. (Stan Strickland). Yellow-crowned Night-Heron: 3 Jun (1 ad with yg) Chatt (KC); 13 Jul-EOP (1-2) Bra. Lev. (BGM).

Duck-Coot: Bufflehead: 20 Jun, 12-19 Jul (1 f) Monterey, Putnam Co. (SJS, David Hume), first summer record in county. Hooded Merganser: 4 Jun (1) Bra. Lev. (KC). Osprey: 11 Jun (1) Sav. Bay (KHD, LHD); nest on transmission line tower (removed late in season by power authority) on Long Is., Kingsport (fide Dee Eiklor, FJA). MISSISSIPPI KITE: 28-29 Jul (1) McMinn Co. (Rick Waldrop, WGH, et al.), about the 6th East Tennessee record. Sharp-shinned Hawk: 28 Jun (1) Jonesborough, Wash. Co. (JWB); 13 Jul (1) Austin Springs, Wash. Co. (JT, PL); only reports. Cooper's Hawk: no reports. American Coot: 13 Jul (2) Baylor L., Chatt (KC et al.).

Killdeer-Woodpecker: Killdeer: yg thru 4 Aug at Lst. (RLK). Greater Yellowlegs: 21 Jul (1) Lst. (RLK, JT, PL), ers. Lesser Yellowlegs: 23 Jul (1) Bra. Lev. (WGH), ers. Solitary Sandpiper: 19 Jul (1/1) Lst./Bra. Lev. (RLK/WGH), ers. Spotted Sandpiper: 12 Jul (1) Lst. (RLK), ers. Upland Sandpiper: 28 Jul (1) Lst. (BLC). Least Sandpiper: 12 Jul (1) Lst. (RLK), ers. Pectoral Sandpiper: 21 Jul (3) Lst. (RLK, JT, PL), ers. Short-billed Dowitcher: 12 Jul-3 Aug (1, 2 on 1 Aug) Lst. (RLK et al.), earliest Johnson City area record. American Woodcock: 19 Jun (1) Austin Springs, Wash. Co. (JWB). Ring-billed Gull: 29 Jul (1) Chick. L. (Elena S. Killian). Black Tern: 22 Jul (1) Sav. Bay (KHD, LHD). Red-headed Woodpecker: 21 Jul (2 ad, 1 im) Lst. (RLK, JT, PL); pairs at 5 other Wash. Co. sites (LRHTOS).

Passerines: House Wren: 2 Jun (1) Maryville, Blount Co. (JAK); 14 Jul (1) Newport, Cocke Co. (JAK). Loggerhead Shrike: 6 sites in Wash. Co. (LRHTOS). Solitary Vireo: 20 Jun (1) Icy Cove, Putnam Co. (SJS); 19 Jul (3) Pickett S.P., Pickett Co. (SJS, BHS). Warbling Vireo: early Jun (nesting pair) Kingsport (Stan Strickland); 20 Jun (1) Lst. (JWB); 22 Jun (4) south fork of Holston R., Sull. Co. (J.Wallace Coffey). Blue-winged Warbler: 7 Jul (1) Chatt (WGH). Chestnut-sided Warbler: 26 Jul (1) about 3-4 miles

northeast of Hinch Mtn., Cumberland Co., (SJS, BHS). Black-throated Green Warbler: 20 Jun (7 m) Icy Cove, Putnam Co. (SJS). Prothonotary Warbler: thru 11 Jul (2+) Rankin Bottom, Cocke Co. (JAK). Swainson's Warbler: 29 Jul (1 singing) Pickett S.P., Pickett Co, (SJS, BHS). SAVANNAH SPARROW: 29 Jul (1 singing) Lst. (RLK), not heard on earlier visits.

Locations: Bra. Lev.-Brainerd Levee, Hamilton Co.; Chatt.-Chattanooga; Chick.L.-Chickamauga Lake, Hamilton Co. portion; Hmlt. Co.-Hamilton Co.; Hiwas. R.-Hiwassee River Area, primarily Meigs Co. but also Bradley, McMinn & Rhea Cos.; Lst.-Limestone, Washington Co; Sav.Bay-Savannah Bay, Hamilton Co.; Sull.Co.-Sullivan Co.; Wash. Co.-Washington Co.

RICHARD L. KNIGHT, 804 North Hills Dr., Johnson City, TN 37604.

EASTERN MOUNTAIN REGION: Some excellent records occurred at Roan and Unaka mountains this summer. The highlight of these was the first recorded nest of Northern Saw-whet Owl for Tennessee. It was a cooler than normal summer. There were some high mountain frosts in early June. Precipitation was near normal, although it seemed much wetter. The Lee R. Herndon Chapter initiated their first annual Summer Bird Count, held 13 June.

Heron-Wren: Yellow-crowned Night-Heron: 17 Jun (5 yg in nest) Sycamore Shoals State Park, Carter Co. (RLK). Bald Eagle: several young hacked at S. Hol. L for second year. Sharp-shinned Hawk: 13 Jun (2) Carter Co. Summer Bird Count; 20 Jun (1) Big Bald Mtn., Unicoi Co. (GRM); 7 Jul (1) Buf. Mtn. (JT, PL); 13 Jul (1) Unaka Mtn., Unicoi Co. (JT, PL). Cooper's Hawk: 13 Jun (2) Carter Co. Summer Bird Count. Peregrine Falcon: 13 Jun (1) Watauga Dam, Carter Co. (BLC), flying overhead. Ruffed Grouse: early June (nest w/6 eggs) Unaka Mtn. (RM). Black-billed Cuckoo: 13 Jul (1) Unaka Mtn. (JT, PL). NORTHERN SAW-WHET OWL: 1 Jul (nest w/4 eggs) Unaka Mtn. (RM), nesting in nestbox, 5 yg present on 2 Aug, this is the 1st nest found in Tennessee, it is also a very late nesting. Whip-poor-will: 15 Jun (16) Holston Mtn., Sullivan County portion (RLK), low number for this route. Alder Flycatcher: 21 Jul (1) Roan Mtn., Carter Co. (RLK), still singing. Least Flycatcher: 8-14 Jul (nest w/3 yg) Roan Mtn. (RLK), 4450 ft. elev. Common Raven: 15 Jun (1) Watauga Dam, Carter Co. (RLK); 12 Jul (1) Stoney Creek, Carter Co. (TM). Red-breasted Nuthatch: 4-6 thru period on Roan Mtn. (RLK) and Unaka Mtn. (RM). Brown Creeper: 7/13 Jun (2/1) Roan Mtn. (RLK); 1/12 Jul (2/2) Unaka Mtn. (FJA). Winter Wren: 21 Jul (15, singing) Roan Mtn. (RLK), max.

Thrush-Siskin: HERMIT THRUSH: 7 Jun-21 Jul (1, singing) Roan Mtn. (RLK). Cedar Waxwing: almost everywhere this summer. White-eyed Vireo: only 6 on Carter Co. Summer Bird Count, very low. Warbling Vireo: thru Jun (1-2) Watauga River, Carter Co. (TM et al.), few reports this year. Golden-winged Warbler: 7 Jun (3) Roan Mtn. State Park, Carter Co. (RLK), max. MAGNOLIA WARBLER: thru period (10+ singing males) Unaka Mtn. (RM, Jerry Nagel, FJA), no nesting evidence. Blackburnian Warbler: 11 Jun-12 Jul (2 singing m) Walnut Mtn./Pond Mtn. area, Carter Co. (RLK, TM). Cerulean Warbler: 7 Jul (pair) Buf. Mtn. (JT, PL). American Redstart: 5 Jun (1 m) S. Hol. L. (RPL); 7-17 Jun (pair + another singing m) Roan Mtn. (RLK), 3600 ft. elev. Indigo Bunting: 8, 21 Jul (2 singing m) Roan Mtn. (RLK), above

Locations: Buf.Mtn.-Buffalo Mountain, Washington Co.; Roan Mtn.-Roan Mountain, Carter Co.; S.Hol.L.-South Holston Lake area, Sullivan Co.; Unaka Mtn.-Unaka Mountain, Unicoi Co.

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OBSERVERS

FJA - Fred J. Alsop
PMA - Peter M. Alfonso
JWB - James W. Brooks
CHB - Carolyn H. Bullock
KC - Kevin Calhoon
WGC - William G. Criswell
BLC - Brian L. Cross
DLD - Don L. Davidson
KHD - Kenneth H. Dubke
LHD - Lillian H. Dubke
TAF - Tim A. Furr
MLG - Murray L. Gardler
MAG - Mark A. Greene
WGH - William G. Haley
RJH - R. John Henderson
RLK - Richard L. Knight
JAK - Jon A. Koella
PL - Pam Lewis
RPL - Richard P. Lewis
MLM - Margaret L. Mann
OKM - O. Knox Martin
RM - Rad Mayfield
GRM - George R. Mayfield
FJM - F. Joseph McLaughlin
BGM - Barbara G. McMahan
TM - Tom McNeil
DoM - Dollyann Myers
RN - Richard Newton
RWP - Robert W. Peeples
WPP - William P. Peeples
VBR - Virginia B. Reynolds
JPR - John P. Rumancik
BHS - Barbara H. Stedman
SJS - Stephen J. Stedman
JT - Julie Tomita
MGW - Martha G. Waldron
DLW - Dick L. Whittington
LRHTOS - Lee R. Herndon Chapter, TOS

The Migrant, 63 (4): 101, 1992.

ANTING BY A CHESTNUT-SIDED WARBLER

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On 19 June 1992, I was birding in shrubby habitat in Roan Mountain State Park, Carter County, Tennessee, at an elevation of approximately 900 m. At 1000 hours, I observed a male Chestnut-sided Warbler (*Dendroica pensylvanica*) anting in a 2.5 m black locust tree (*Robinia pseudoacacia*). For approximately three minutes, this bird hopped from branch to branch and repeatedly picked items off the twigs and then inserted them in his feathers under the base of his wing in the manner typical of other birds I have observed anting. When the bird flew off after about 20 such incidents, I inspected the tree and found numerous 7 mm long ants of the type with a red head and thorax and a black abdomen.

A review of the literature revealed only two previous reports of anting among paruline warblers. Dater reported anting by the Blue-winged Warbler (*Vermivora pinus*) in New Jersey (Auk 70: 89, 1953) and Tedards reported anting by the Prothonotary Warbler (*Prothonotaria citrea*) in South Carolina (*Chat* 31: 77, 1967). Both of these reports are similar to my observation in that the birds were anting in vegetation above the ground.

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RAPTOR BANDING AT THE MEMPHIS ZOO & AQUARIUM

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While most residents of Tennessee know that Memphis is the home of one of the top zoos in the United States, they may not know that one of the oldest programs at the zoo is the Raptor Rehabilitation program. Started almost 17 years ago, the program has grown from a few birds a year coming mainly from Shelby County to a major program involving almost 200 birds a year from not only Tennessee but also Mississippi and Arkansas and states as far away as Kentucky, Missouri and Alabama. The program is the largest raptor-only rehabilitation program between St. Louis and New Orleans.

When the program was started, one of the first decisions made was to band all released birds. This would include not only rehabilitated birds, but also orphans and birds banded on the nest. The main reason for banding these birds was to be able to monitor released birds and use the information for future releases. It is important to be able to follow up the released birds so as to be able to tell where the birds go after release. If it looks like the birds are staying in the general area of release, then a new site is needed in order to avoid overcrowding. If, however, the birds disperse to other areas, then a certain release site can be used again.

In 1980 an article was published detailing the release of banded birds from 1978 to 1980 (see ***The Migrant***, December 1980). This article will cover those birds released from 1981 through 1991. A total of 452 birds of 16 different species were released during this time. **Table 1** shows species released as well as the county where the release took place. It should be noted that the numbers range from a low of only one bird (Northern Saw-whet Owl, *Aegolius acadicus*; Northern Goshawk, *Accipiter gentilis*; Sharp-shinned Hawk, *Accipiter striatus*; and Golden Eagle, *Aquila chrysaetos*) to a high of 104 (Eastern Screech-Owl, *Otus asio*). It should also be noted that a species of falcon (American Kestrel, *Falco sparverius*) was the second most common species.

It is immediately obvious that Shelby County was the most common county used for releases during the period. It should be noted, however, that in the past few years many new release sites have been used and Shelby County is not used as often now. However, with Meeman Shelby and T.O. Fuller State Parks, Plough Park and the Sewage Lagoons, there are still many excellent release sites in Shelby County. This is especially true for hawks.

Suitable habitat is the most critical factor in picking a release site. The Northern Saw-whet Owl and the Golden Eagle were far from their normal ranges, so both were sent out of state for release. A similar problem exists with the Great Horned Owls (*Bubo virginianus*). Large areas are needed for these birds, so it is necessary to find remote areas for release. Birds are released at least 3.2 km (2 miles) away from the nearest known owl habitat, so it is often necessary to travel 13 km (8 miles) to 160 km (100 miles) outside Memphis for release of these large raptors. Eastern Screech-Owls are released in a much smaller area so there are many good sites much closer to Memphis.

Table 1.

BIRDS OF PREY BANDED 1981 - 1991

	TENNESSEE													ARKANSAS				MISSISSIPPI					
SPECIES	Shelby	Fayette	Tipton	Haywood	Ruthford	Laud.	McNairy	Lake	Cheathan	Henry	David.	Stewart	Perry	Critt.	Miss.	Monroe	Phil.	Desoto	Mars.	Chac.	Tate	Others	TOTAL
Red-tailed Hawk *Buteo jamaicensis*	54	3	1			1								5							2		66
Broad-winged Hawk *Buteo platypterus*	8		1								1			1			1						12
Red-shouldered H. *Buteo lineatus*	7																						7
Harrier *Circus cyaneus*	1													1									2
Cooper's Hawk *Accipiter cooperii*	5																						5
Sharp-shinned Hawk *Accipiter striatus*	1																						1
Great Horned Owl *Bubo virginianus*	29		2	6								4	1	2		1		4	1		1		51
Barred Owl *Strix varia*	31	3		3			1	1		11				1		1		2		2			56
Barn Owl *Tyto alba*	27		4	1	3	1			7		5					6		2					56
Screech Owl *Otus asio*	78	3	9															13	1				104
Saw-whet Owl *Aegolius acadicus*																						Kankakee Co. Ill.	1
Am. Kestrel *Falco sparverius*	67		9			1		3						1	1			1					83
Turkey Vulture *Cathartes aura*													1										1
Mississippi Kite *Ictinia mississippiensis*	5																						5
Goshawk *Accipiter gentilis*	1																						1
Golden Eagle *Aquila chrysaetos*																						Boulder Co. Co.	1
TOTAL	314	9	26	10	3	3	1	4	7	11	6	4	2	11	1	8	1	22	2	2	3	2	452

In the period covered by this article, 452 birds were banded and released. Another 181 Mississippi Kites (*Ictinia mississippiensis*) were imported from Kansas for release in the West Tennessee area. Out of these 633 birds, only seven have been covered. Three Great Horned Owls, two Red-tailed Hawks (*Buteo jamaicensis*), one Barn Owl (*Tyto alba*), and one Barred Owl (*Strix varia*) have been returned. The longest time between release and recovery has been three years and three months for a Red-tailed Hawk. The shortest time was only 13 days for another Red-tailed Hawk. It is impossible to come to any conclusions with such a small percentage of "returns", but by looking at where the birds were released and where they were found, it is possible to make some educated guesses. The owls were all found within two miles of the release site. The hawks were generally much farther away. One was recovered in the area of Bloomfield, Iowa. With this information in mind, it is now a common practice to release all species of owls at different release sites, since it would appear that they are much more sedentary than hawks. Hawk sites are used much more often as it would seem that they disperse soon after release. Hopefully, as the number of released birds grows and more "returns" appear, it will be possible to see new patterns of post-release actions. Until then the best that can be done is to try and find more suitable release sites for all species, especially for the hawk species.

One final item of interest involves the recovery of a Red-tailed Hawk that was banded by another individual. In February of 1989 this bird was found injured in western Shelby County. The band was traced to a bander in Hanover, Illinois, who had banded the bird as a chick on the nest the previous October. The bird was probably following the Mississippi River south to escape the winter conditions in Illinois. It is the only time in 20 years that a banded bird has been recovered by us. The bird was rehabilitated and released in the spring of 1989.

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The Migrant, 63 (4): 105-106, 1992.

CHESTNUT-SIDED WARBLER NESTS IN SEQUATCHIE COUNTY

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While participating in the Breeding Bird Atlas project, the Chestnut-sided Warbler (*Dendroica pensylvanica*) was confirmed nesting south of Palmer at 670 m (2200 feet) elevation on 8 June 1991 in Sequatchie County.

The warbler's habitat consisted of honeysuckle, blackberries, sassafras and scattered small trees that were used by the males as singing perches. My wife Lil, Robert L. Pierce and myself had been working the block since 04:40 hours CDT that morning and had agreed to meet at a coal mine security office near Tennessee Highway 108. At 08:50 hours CDT, Lil and I met and were discussing the morning's results when we simultaneously recognized the spirited song of a male singing nearby. Immediately we started searching for the singer, who was quickly found. Lil stayed at the site to watch for any evidence of nesting while I walked over the surrounding area to search for more evidence.

While I was away, Lil was able to confirm a female feeding two dependent young. To the best of our ability, we were able to confirm at least two males singing on territory in this area. Later we were able to show Bob Pierce the singing males.

It appears the Chestnut-sided Warbler is expanding its historic range south on the Cumberland Plateau. Arthur Cleveland Bent, in his account (1953) on the species, presented an excellent report on the known status and distribution of the bird up to that time. McNair, in his paper (1987), further reviews the past and current status of the warbler in the Southern Appalachian Mountains, while Nicholson (1987) presented breeding evidence for the species in the Morgan County section of the Cumberlands. In the years 1976 (Jacobson 1976), 1977 (Jacobson 1977) and 1979 (Dubke & Dubke 1979), I recorded a male Chestnut-sided singing on territory in June at Point Park on Lookout Mountain in Hamilton County. I never discussed any evidence of a mate or nesting. This location was at 610 m (2000 feet) above sea level.

On the 3 June 1979 Breeding Bird Survey, in the Tennessee River Gorge, Marion County, along Kelly's Ferry Road, at 210 m (700 feet) elevation, Lil recorded (Dubke & Dubke 1979) a single, singing Chestnut-sided Warbler. The site was later checked to confirm if the individual was on territory, but it was never found again. This bird was probably a late migrant. On 20-21 June 1987, singing males were found at two locations on the plateau portion of Bledsoe County (Knight 1987). During the Atlas project, Mary A. Zimmerman recorded an individual farther south near Sewanee, Franklin County, in June 1989.

The first nesting of the species in Alabama was confirmed in Jefferson County in 1991 (Jackson 1992). Jackson further commented there are several other summer records for the species in the state. This section of the plateau has had some investigations for breeding species in the past; however, these are the only records of the warbler during the summer nesting season I'm aware of. From the evidence on hand, it now appears field workers should stay alert to the nesting of the Chestnut-sided Warbler in any suitable habitat on the southern part of the Cumberland Plateau.

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The Migrant, 63 (4): 107, 1992.

HARRIET ALICE SMITH

Lula and Ben Coffey
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A longtime friend and a member of the Memphis Chapter since 1933, Alice Smith passed away 27 June 1993, at Covington. Born 12 December 1907, and a high school graduate there, she moved to Memphis to attend a commercial college, being Lula's roommate at one time. She was employed as a secretary to the manager of the regional accounting office of Sears-Roebuck and Company, retiring in 1972 and moving back to the home place on Liberty Road just outside Covington.

Alice was president of the Memphis Chapter, 1964-65, and at times local director, state director and state vice-president. She participated in 35 Memphis Christmas Bird Counts and made five at Covington. For the Breeding Bird Survey, U.S.F.&W.S., she ran the Brownsville route 1966-1982. Alice took part in many Chimney Swift bandings and most of our heron banding expeditions. She joined us on many birding trips over the mid-south and with Lula visited (and birded) Norfolk, Virginia. She joined Wendell Whittemore and us on our 1958 birding vacation down Mexico's Gulf Coast to the Tehuantepec Isthmus and back through the Sierra Madre on the Inter-American Highway. With a respectable life list, we envied her not some exotic species, but the Bewick's Wrens which nested at her home. They, too, are now gone.

May the Spring Beauties each year carpet the lawn of that cemetery along the highway in downtown Covington, and may a Mockingbird offer its songs as the seasons pass.

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The Migrant, 63 (4): 108-111, 1992.

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NOTICE TO RESEARCHERS

Several references in this issue include dates later than the cover date of December 1992. The journal is behind schedule and it has been necessary to use material which, in some cases, was submitted and accepted later in the year.

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